

FIG. 1(a)

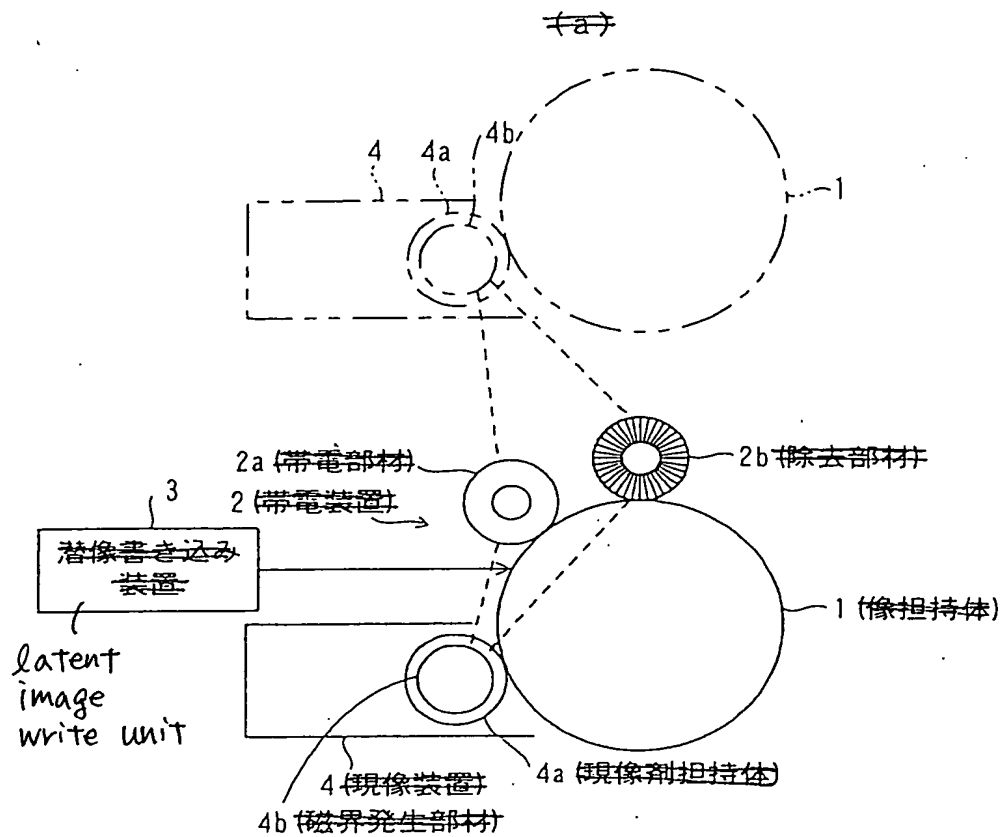


FIG. 1(b)

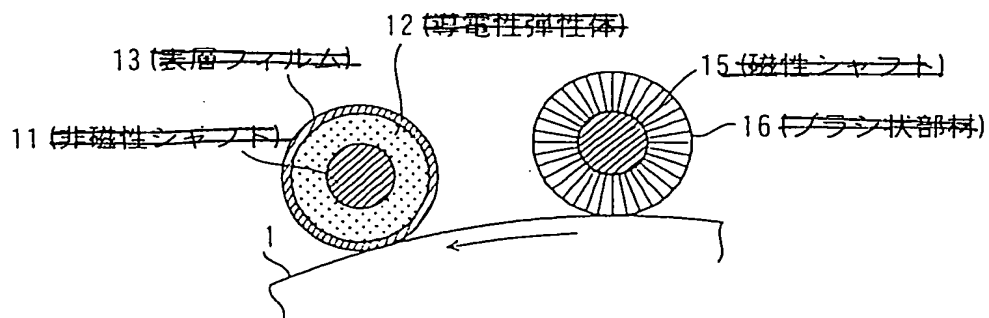


Fig. 2

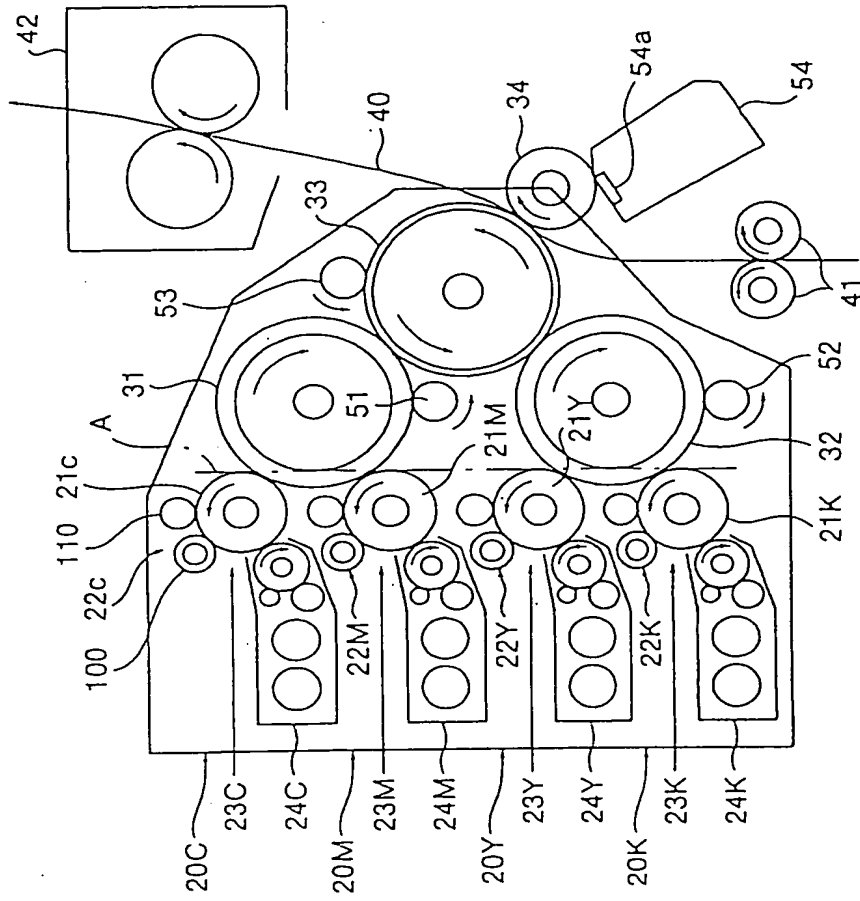


FIG. 3

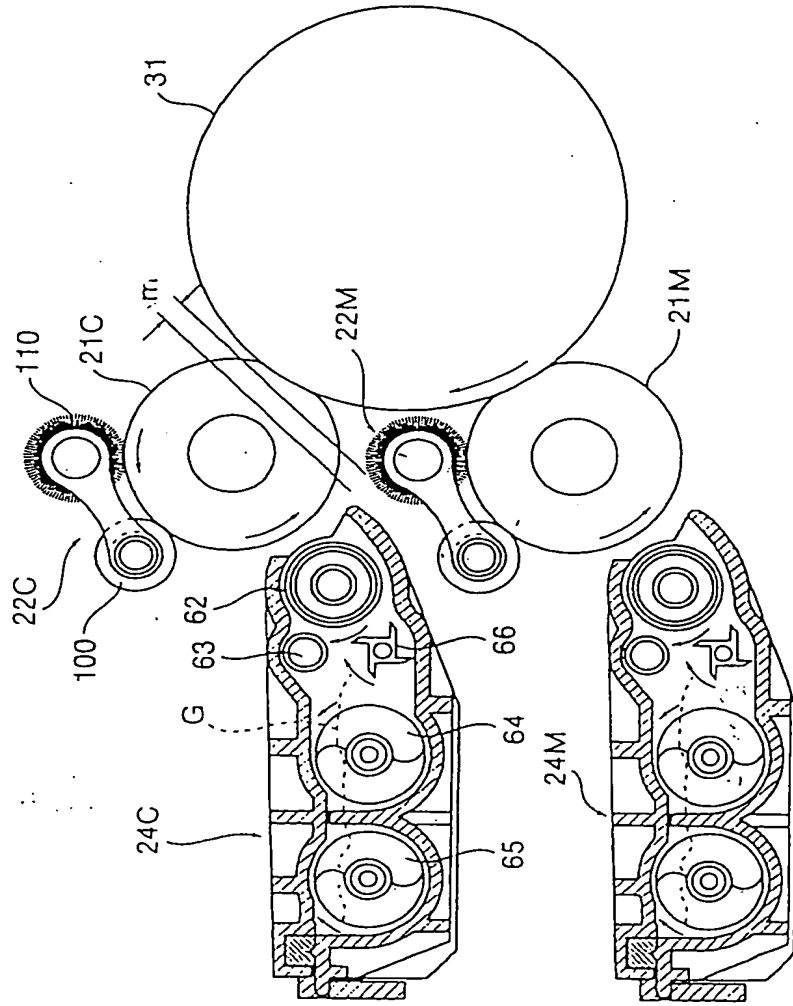
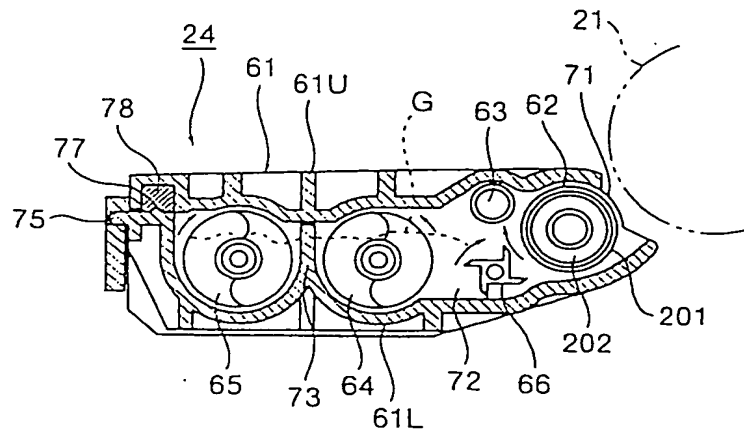


FIG. 4



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FIG. 5

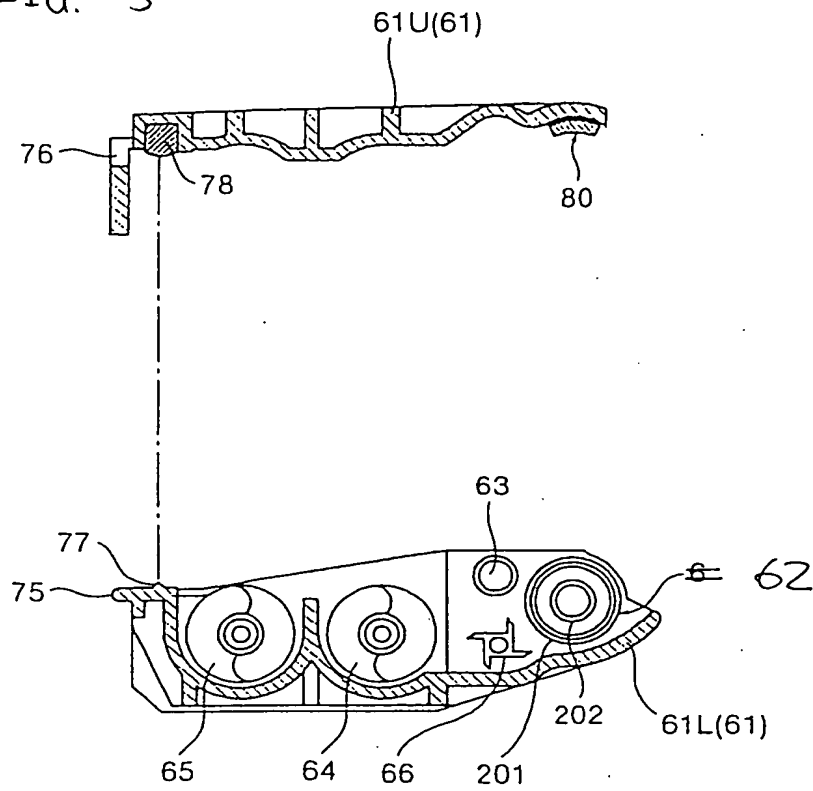


FIG. 6

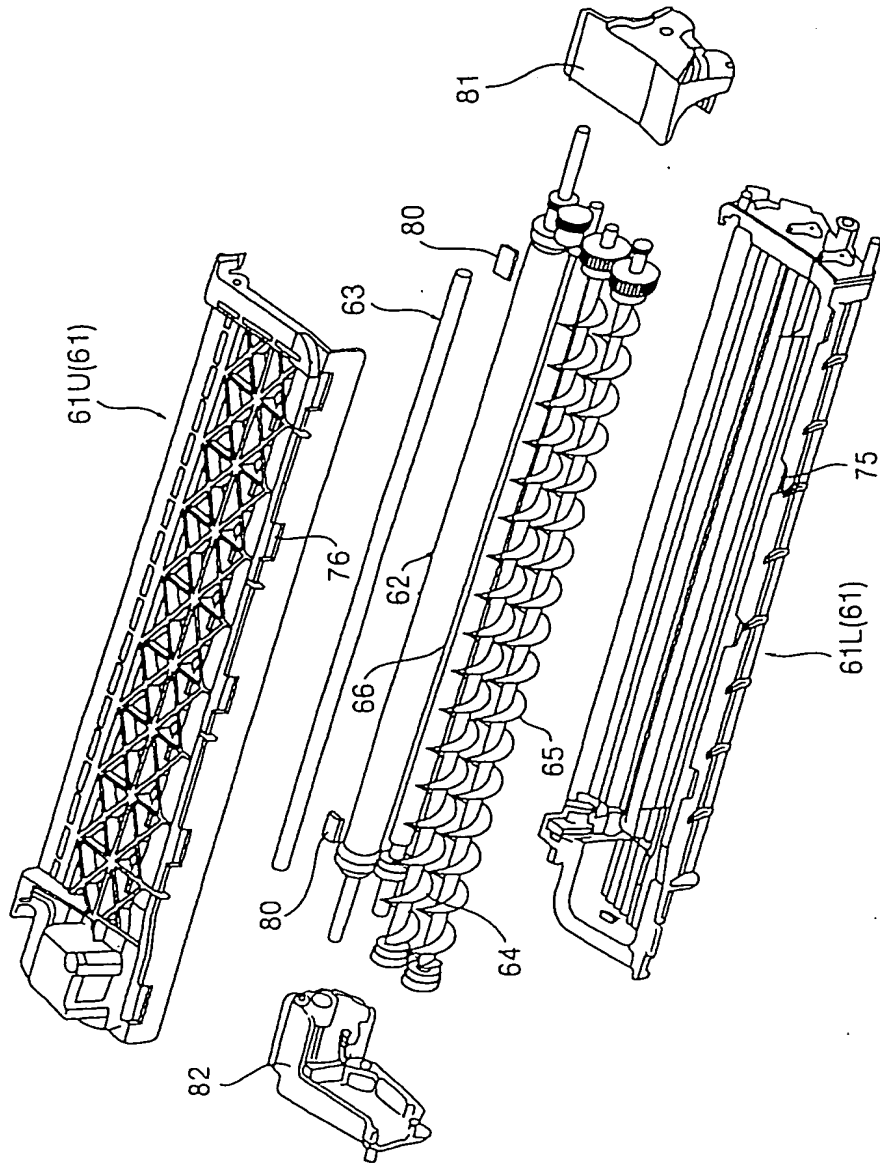
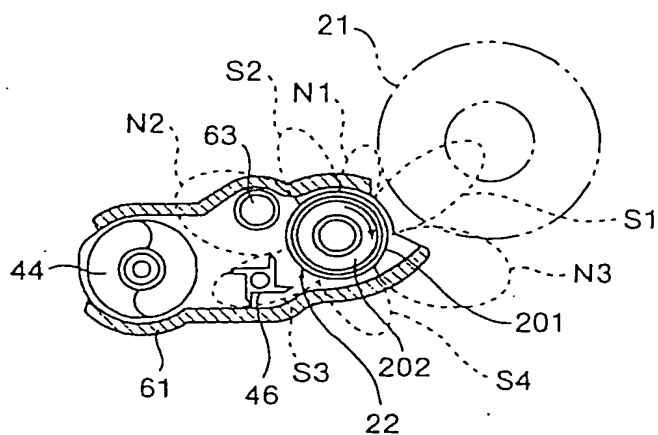


FIG. 7



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FIG. 8(a)

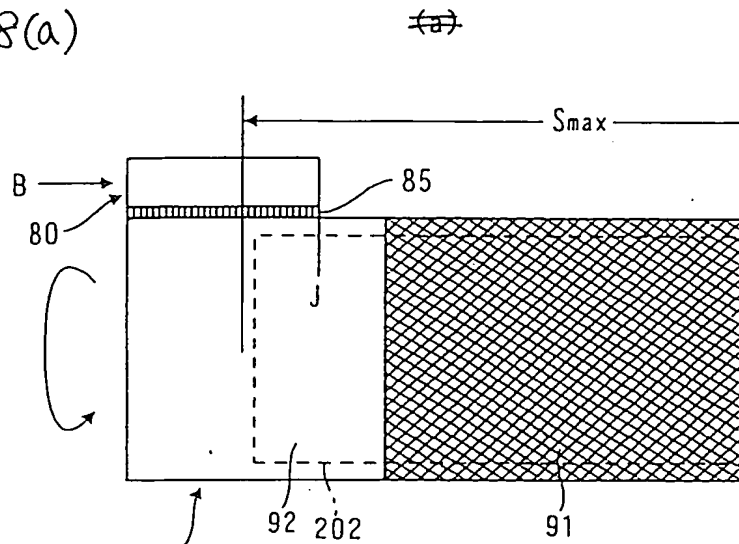
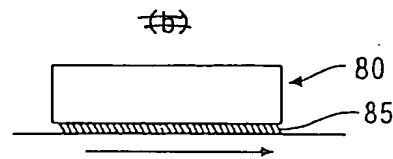


FIG 8(b)



~~FIG. 9(a)~~ FIG. 9(a)

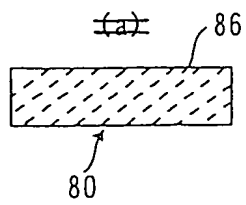


FIG. 9(b)

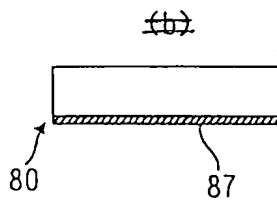


FIG. 9(c)

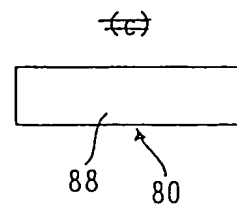


FIG. 10(a)

~~(a) 実施の形態モデル~~

model according to first embodiment

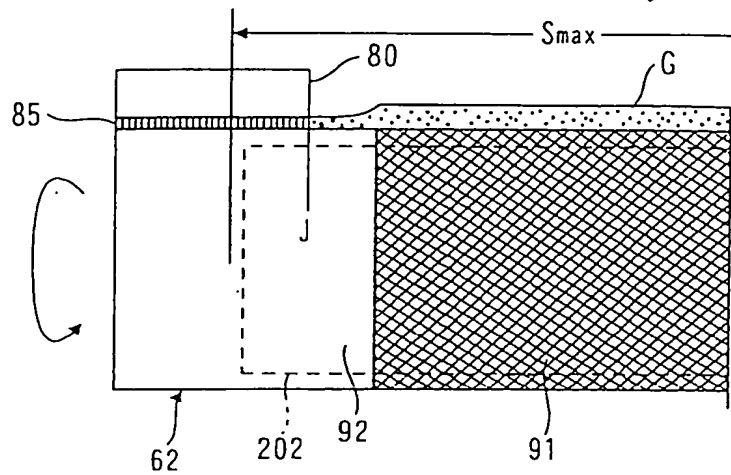
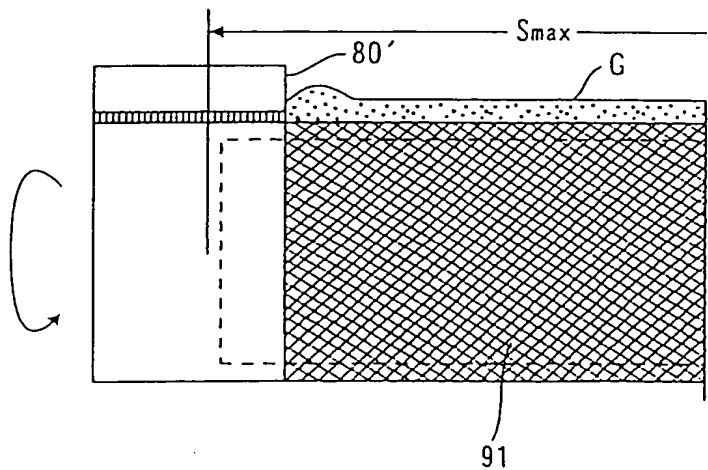


FIG. 10(b)

~~(b) 比較の形態モデル~~

comparative model



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FIG. 11(a)

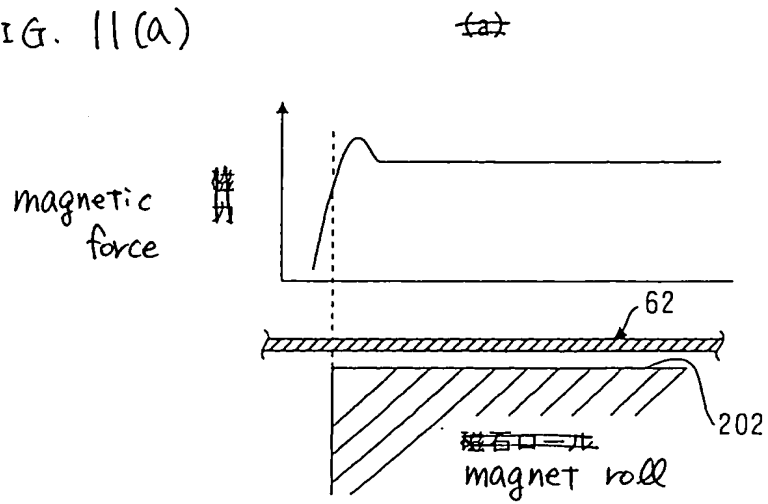
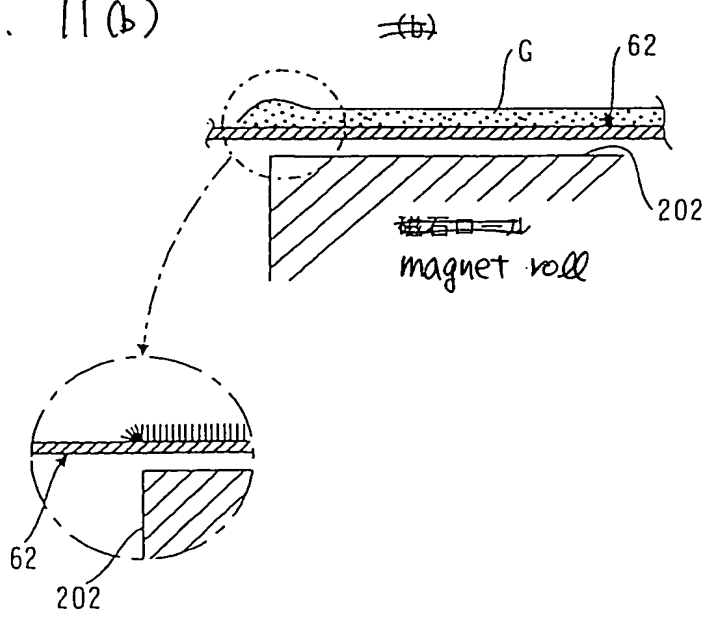


FIG. 11(b)



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FIG. 12 (a)

~~(a)~~

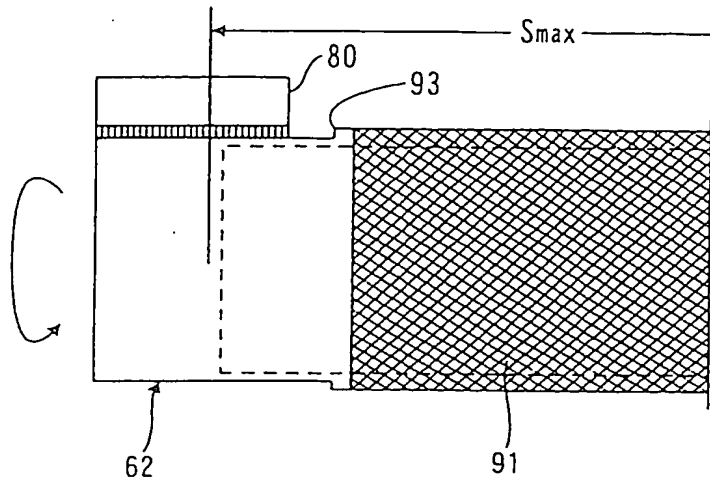


FIG. 12 (b)

~~(b)~~

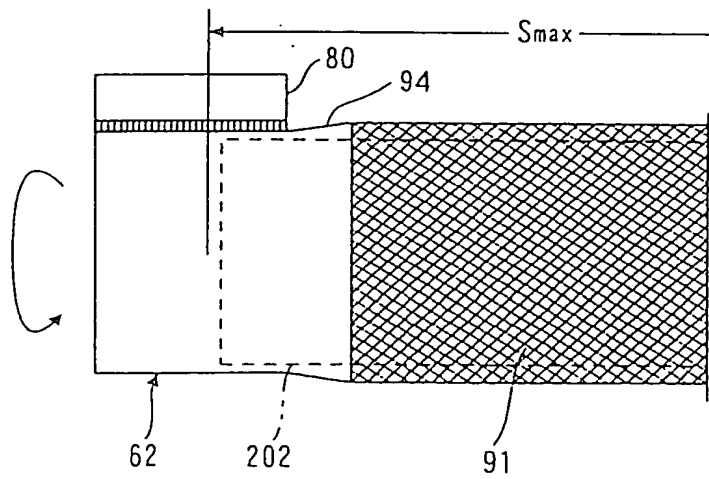


FIG. 13

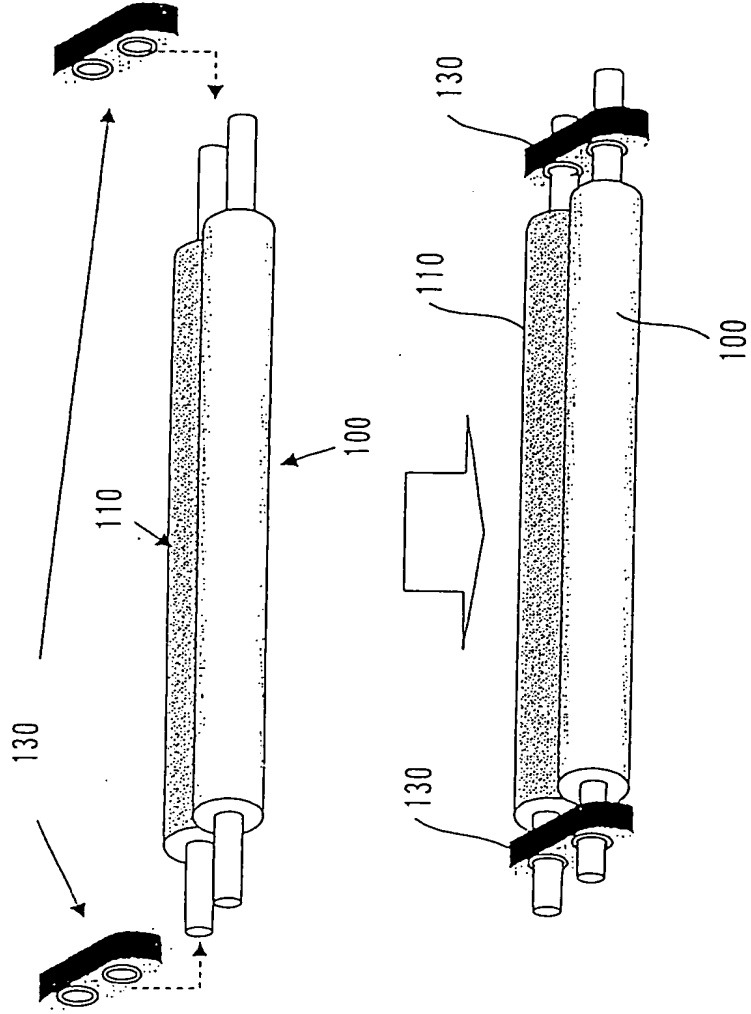


FIG. 14(a)

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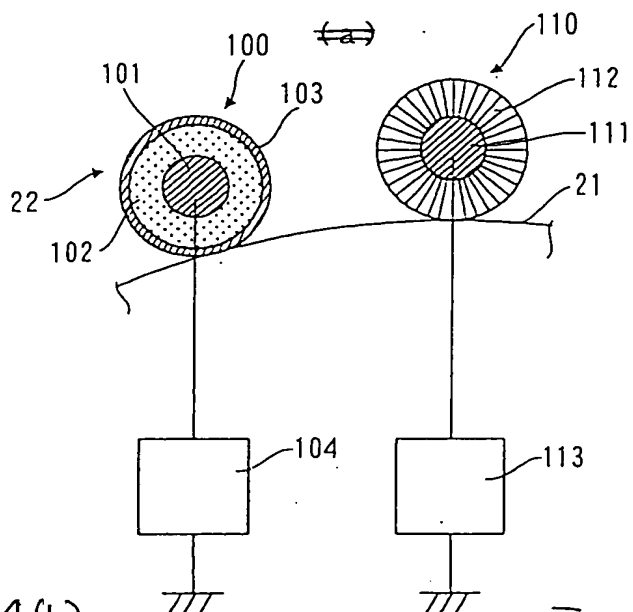


FIG. 14(b)

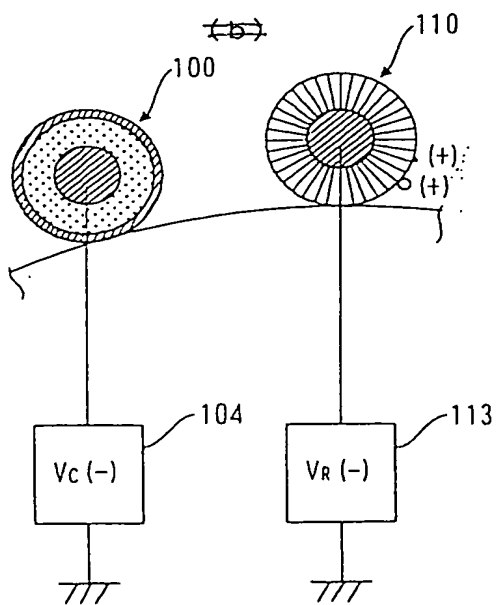


FIG. 14(c)

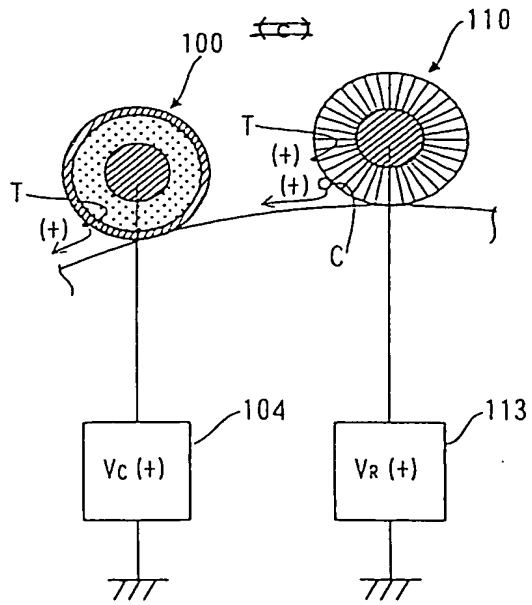


FIG. 15(a)

end part spot caused by BCO/carryer scatter
 ●BCO/キャリア飛散による端部斑点
 paper end part position

		用紙 端部位置	用紙端部～プラスチック端部 距離		
			3mm	4mm	5mm
(a) 薄層域規制 位置～プラスチック 端部距離	0mm	×	○	△	△
	1mm	—	△	○	○
	2mm	—	△	○	○

distance between
paper end part
and
plast end part

distance
between
thin layer
area
regulation
position
and
plast
end
part

FIG. 15(b) fogging at upper end part of photoconductor drum
 ●感光体ドラム上端部カブリ
 paper end part position

		用紙 端部位置	用紙端部～プラスチック端部 距離		
			3mm	4mm	5mm
(b) 薄層域規制 位置～プラスチック 端部距離	0mm	×	△	△	△
	1mm	—	△	○	○
	2mm	—	○	○	○

※プリント中シャットダウン時、フタ転写

FIG. 15(c) dirty level of driver gear in periphery of developing roll end part
 ●現像ロール端部周辺駆動ギア汚れレベル

paper end part position		用紙 端部位置	用紙端部～プラスチック端部 距離		
			3mm	4mm	5mm
(c)	薄層域規制	x	△	○	○
	位置～ラスト	—	○	○	○
	端部距離	—	○	○	○

shut down during print,
tape transfer

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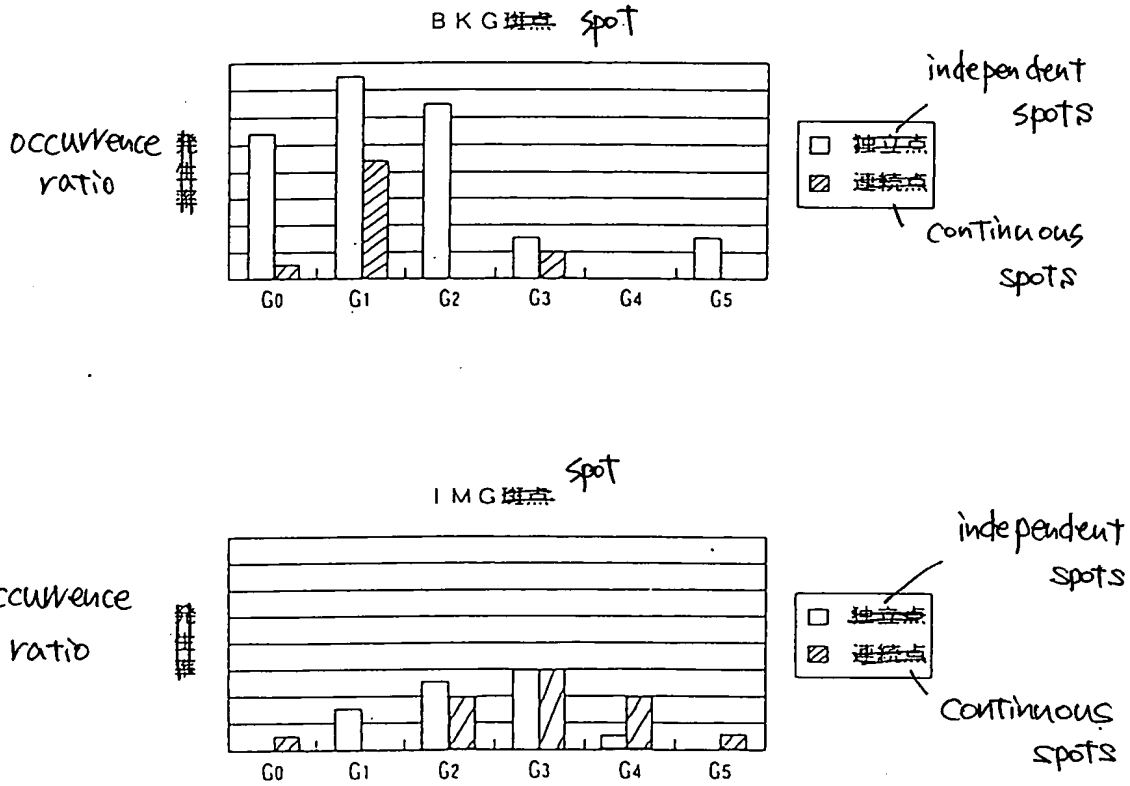
FIG. 16

charging shaft

~~帯電シフト~~ : SUM

~~サフレスキヤシフト~~ : SUM

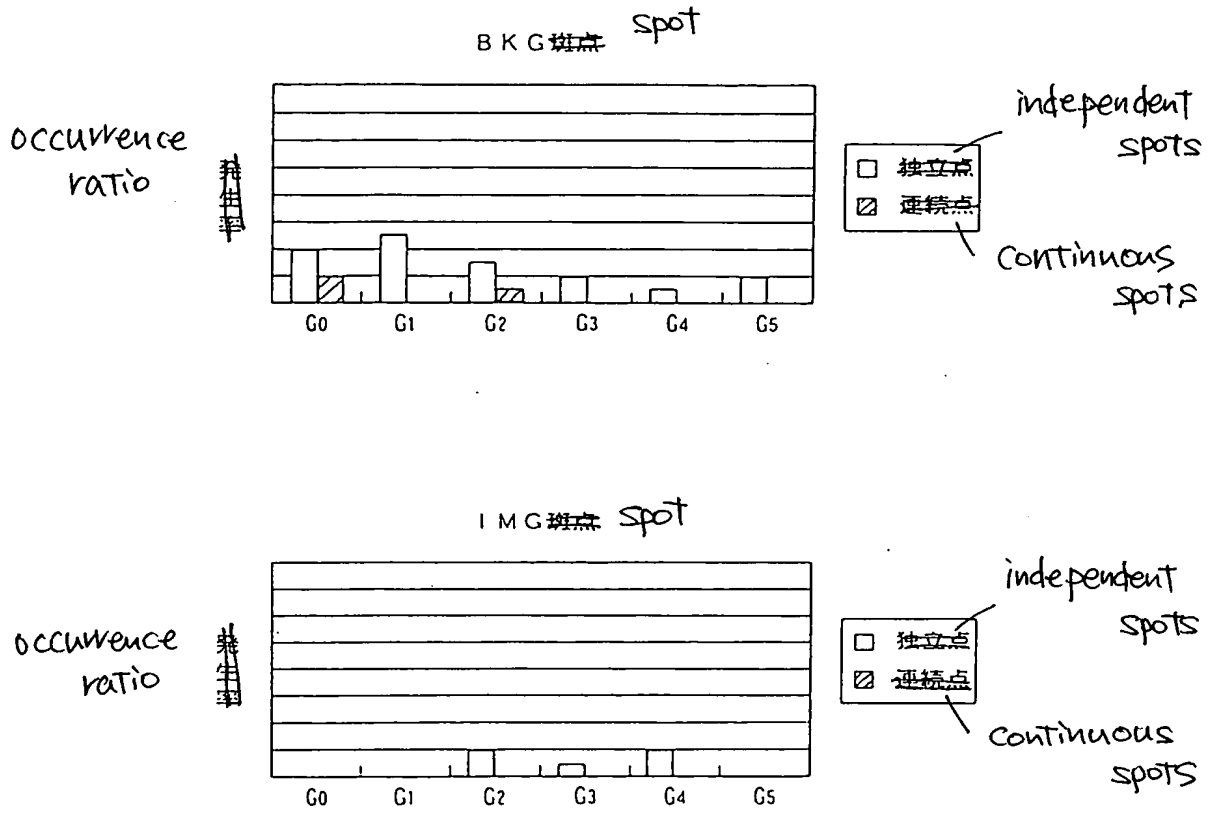
refresher shaft



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FIG. 17

charging shaft
~~充電シャフト~~ : SUS303Cu
~~リフレッシュシャフト~~ : SUM
 refresher shaft



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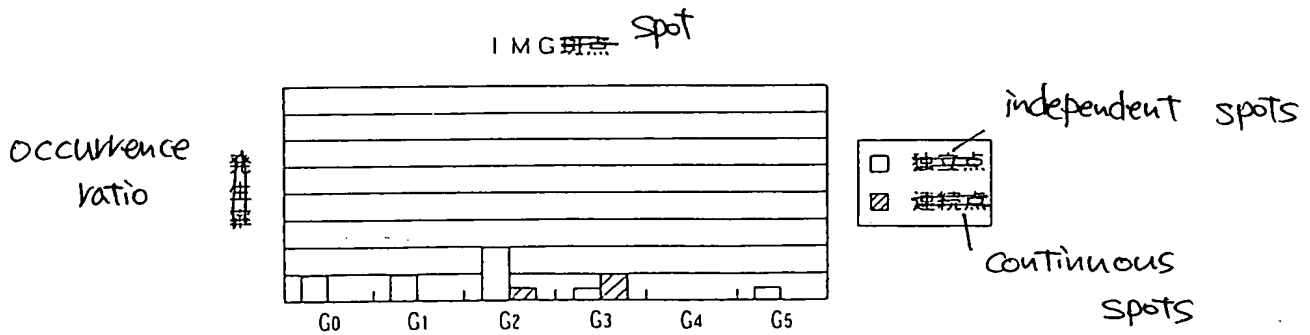
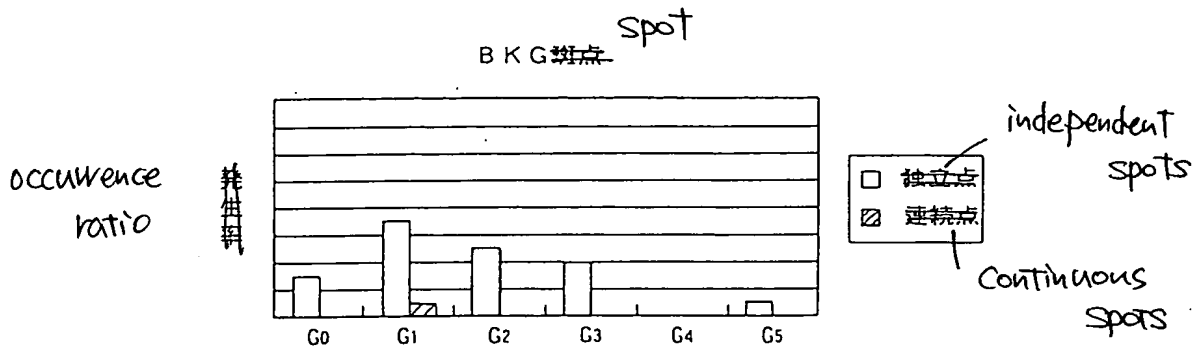
Fig. 18

charging shaft

~~帯電シャフト~~: SUS303Cu

~~サライツシャフト~~: SUS303Cu

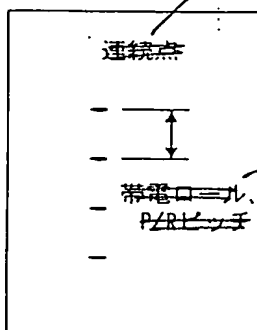
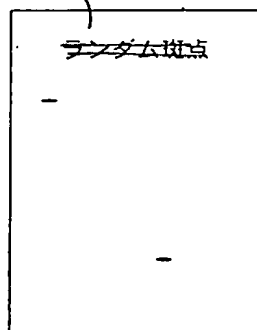
refresher shaft



spot classification
by phenomenon

random spots

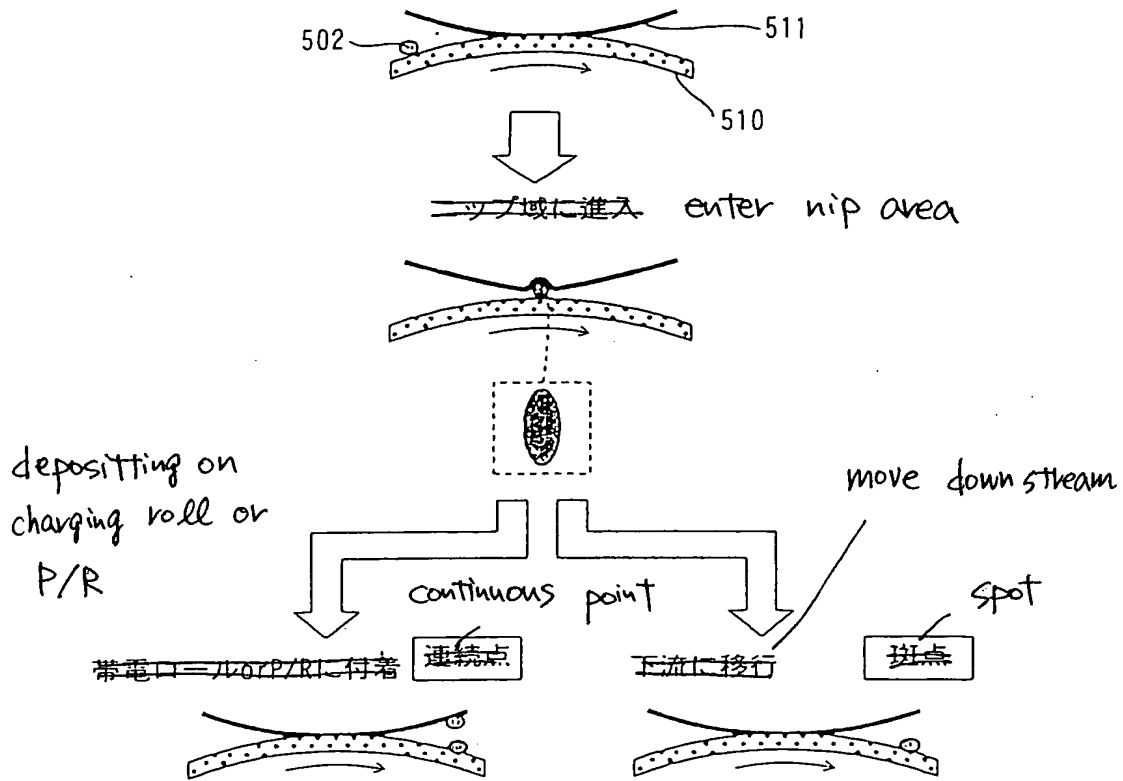
Continuous points



charging roll,
P/R pitch

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FIG. 20



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図 21 (a)

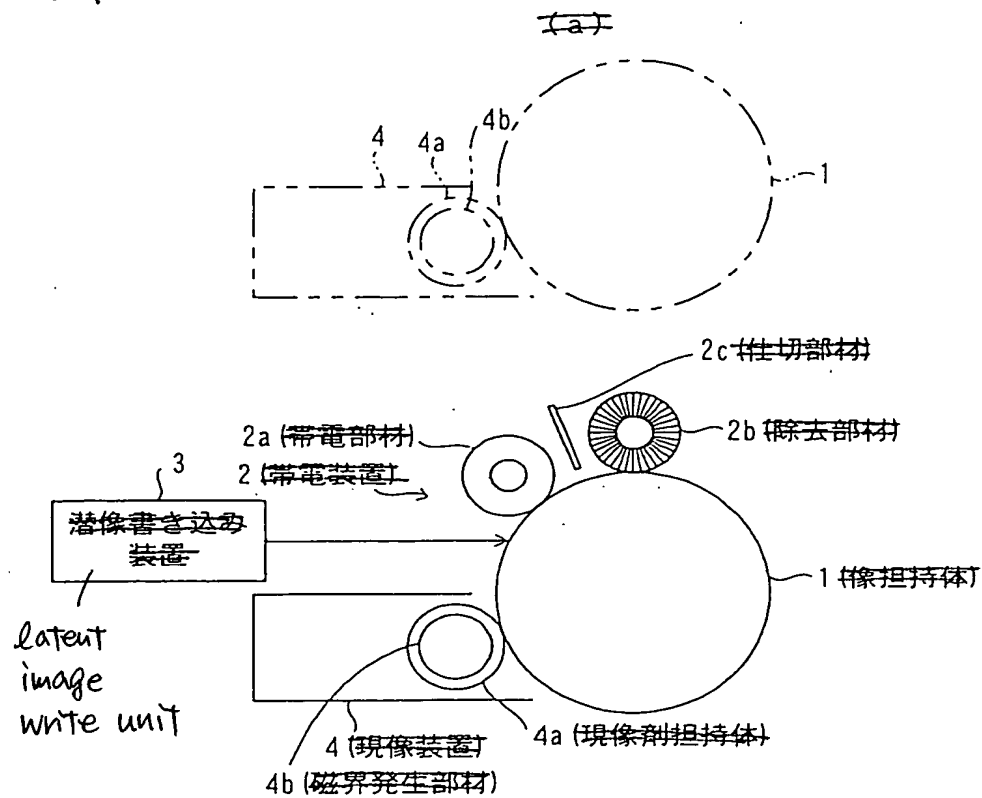


FIG. 21 (b)

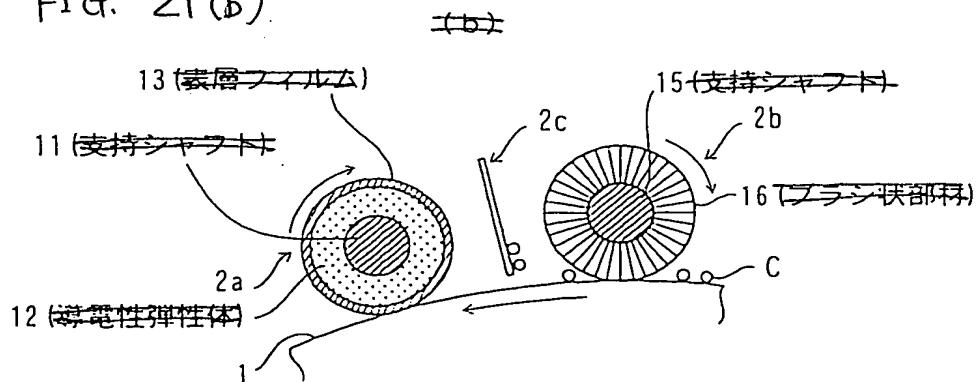


FIG. 22 (a)

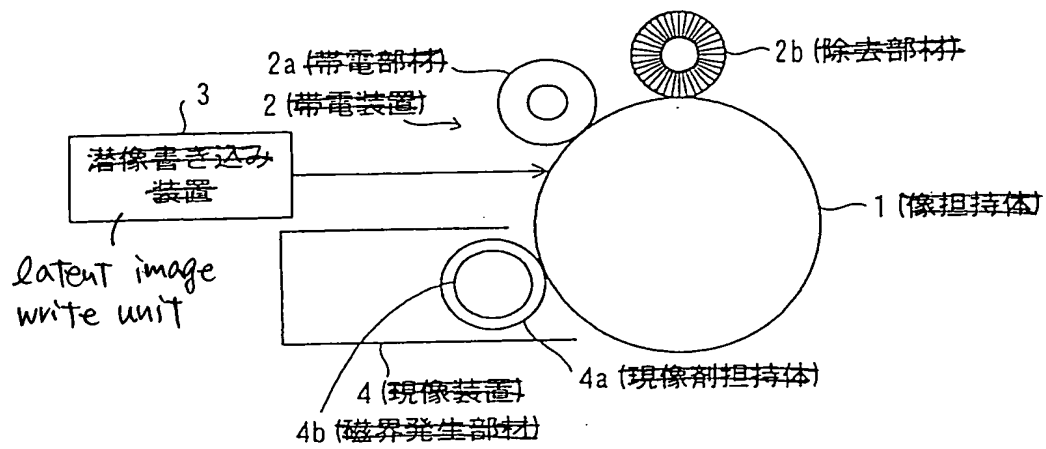
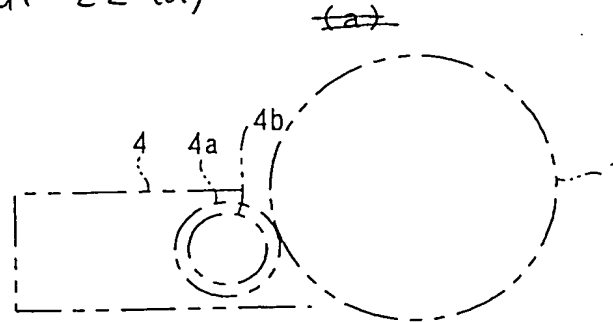
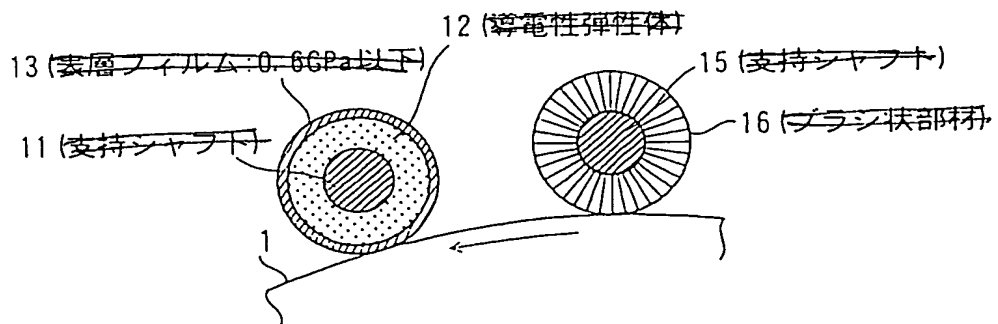
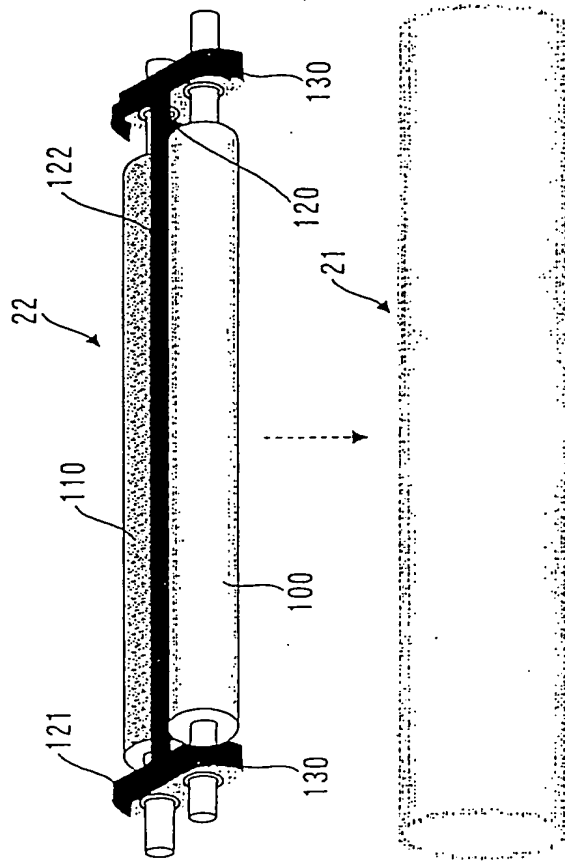


FIG. 22 (b)



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FIG. 24



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FIG. 25(a)

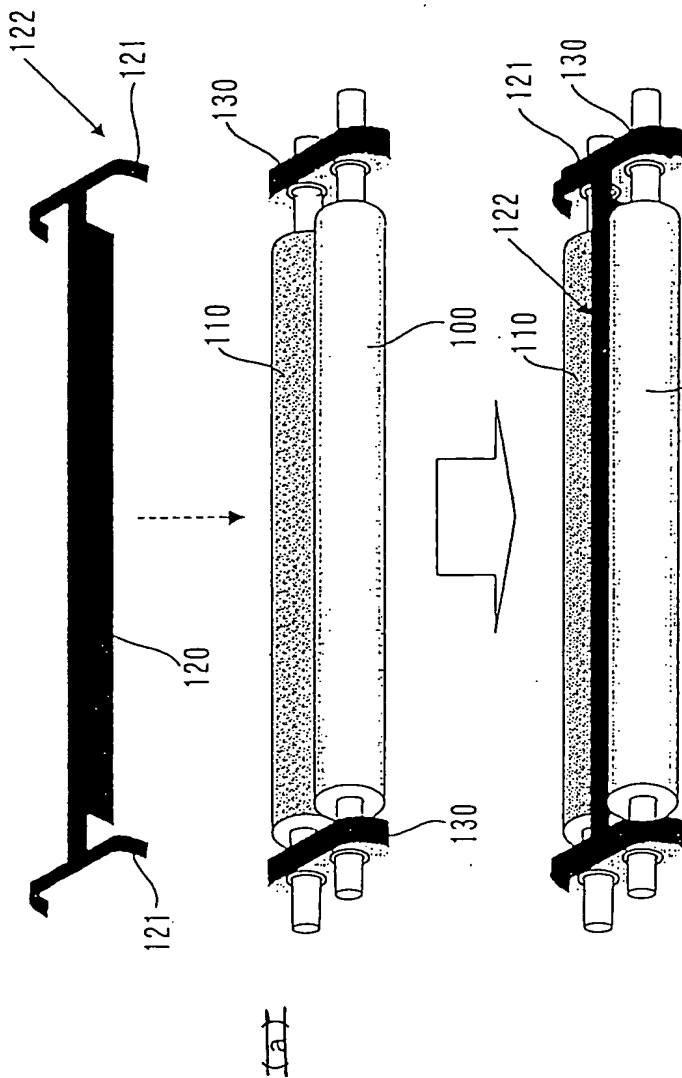
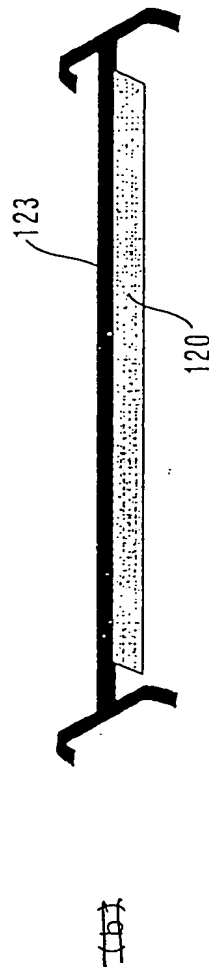


FIG. 25(b)



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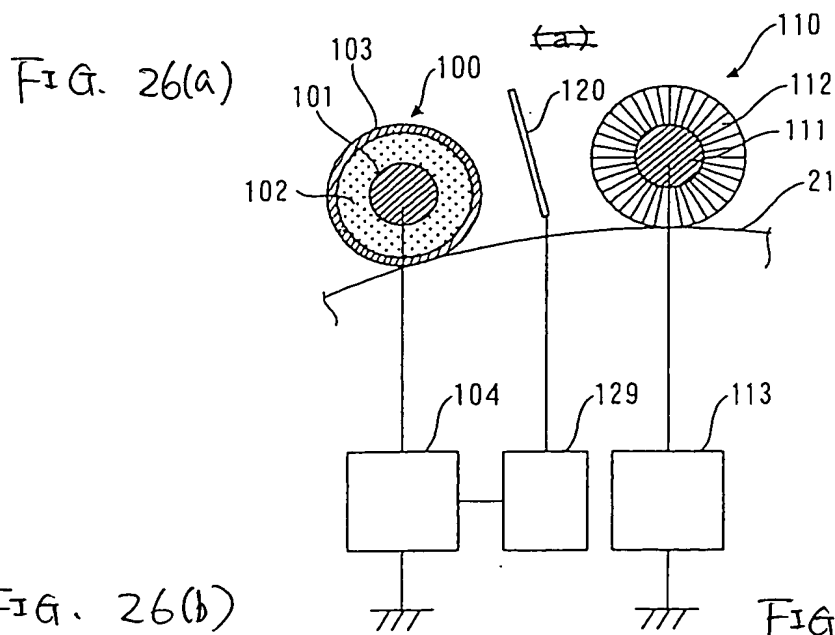


FIG. 26(b)

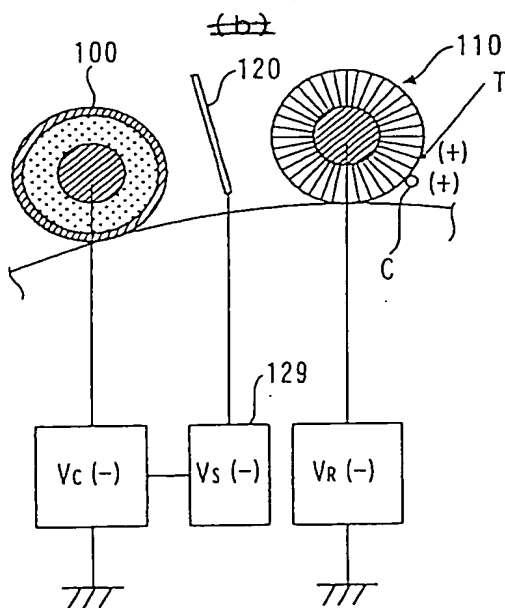
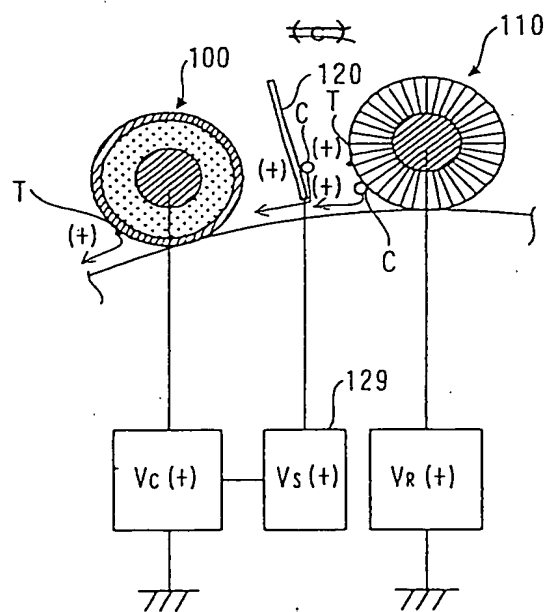


FIG. 26(c)



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FIG. 27(a)

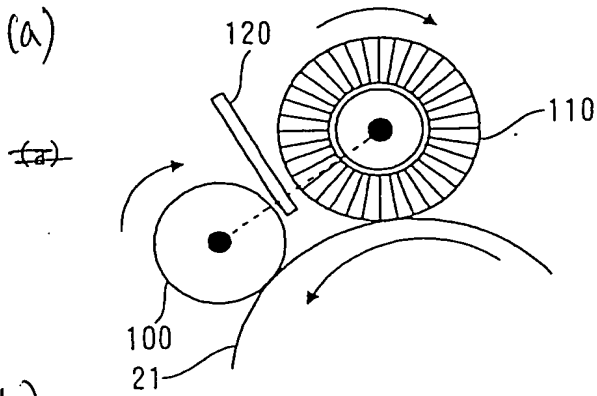


FIG. 27(b)

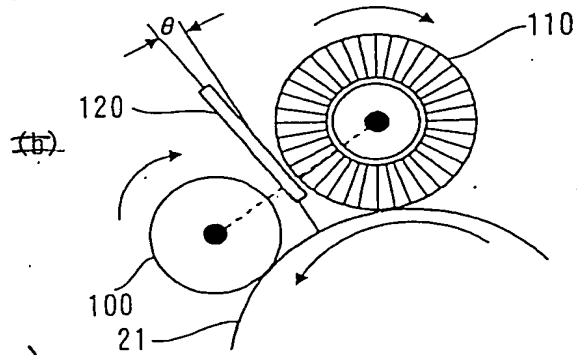
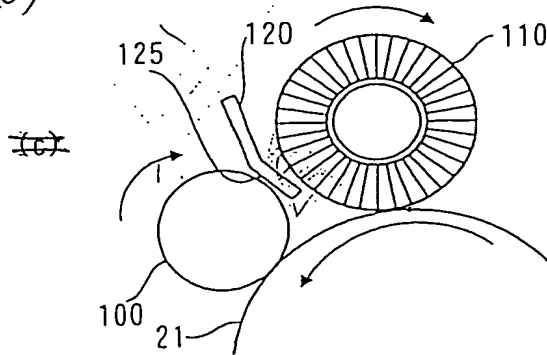


FIG. 27(c)



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FIG. 28(a)

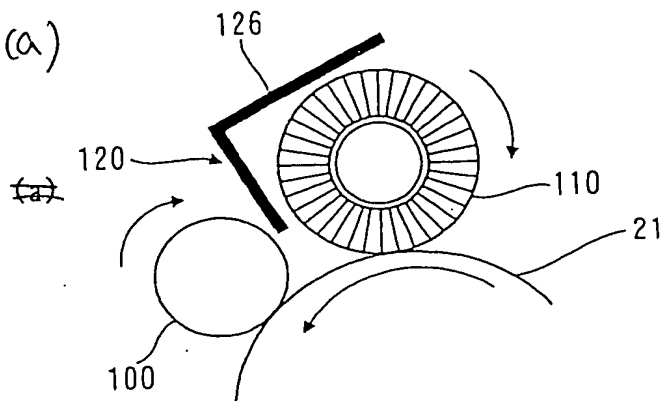


FIG. 28(b)

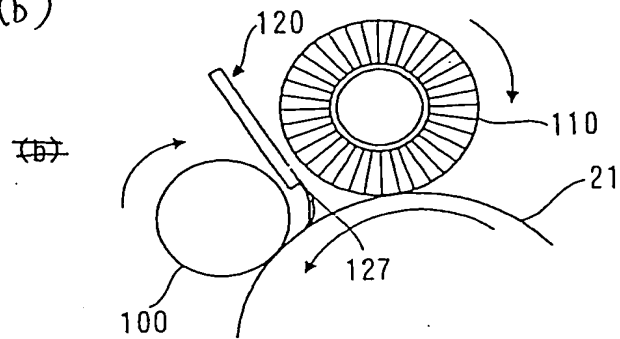
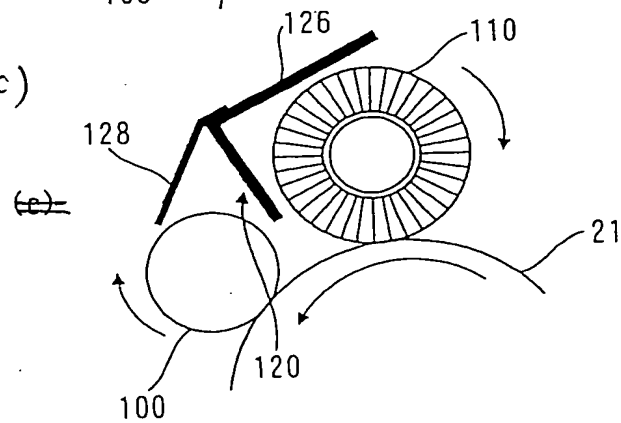


FIG. 28(c)



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FIG. 29(a)

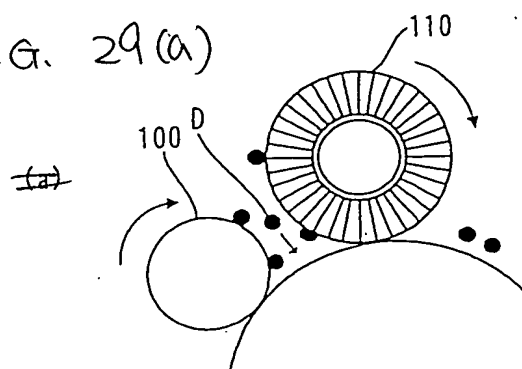


FIG. 29(b)

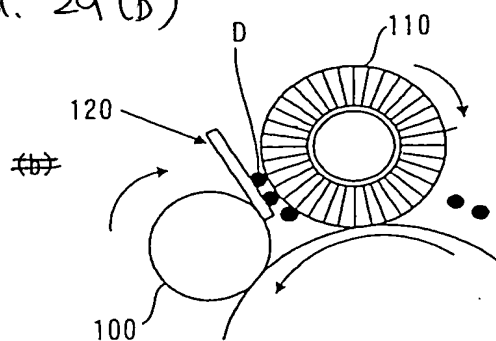
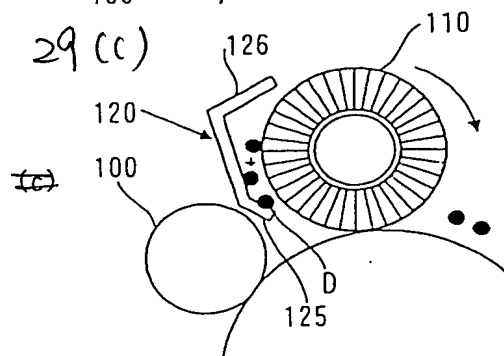
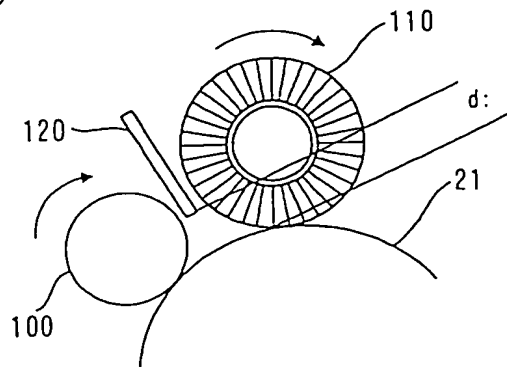


FIG. 29(c)



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FIG. 30



contact

occurrence of spot

d (mm)	斑点発生 有無
0 (接触)	○
0.5	○
1.0	○
2.0	○
3.0	○
4.0	×

FIG. 31

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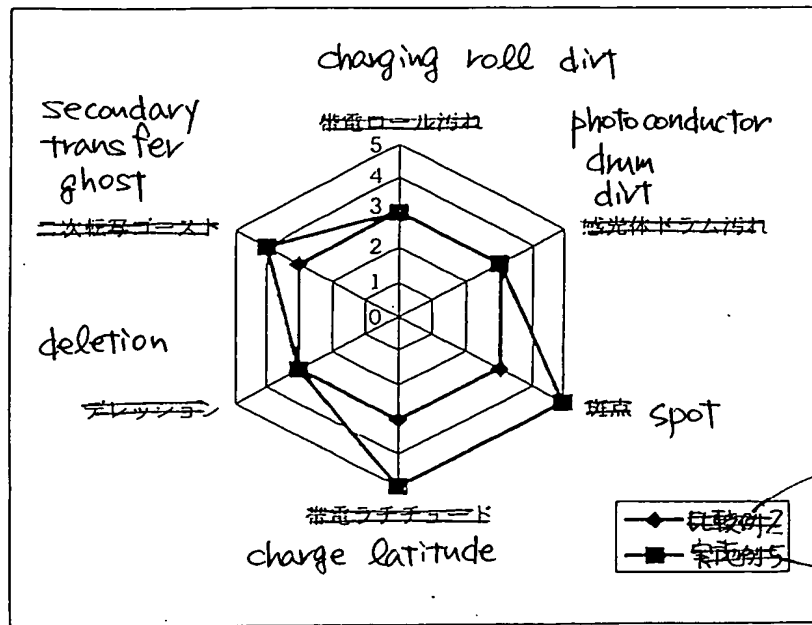
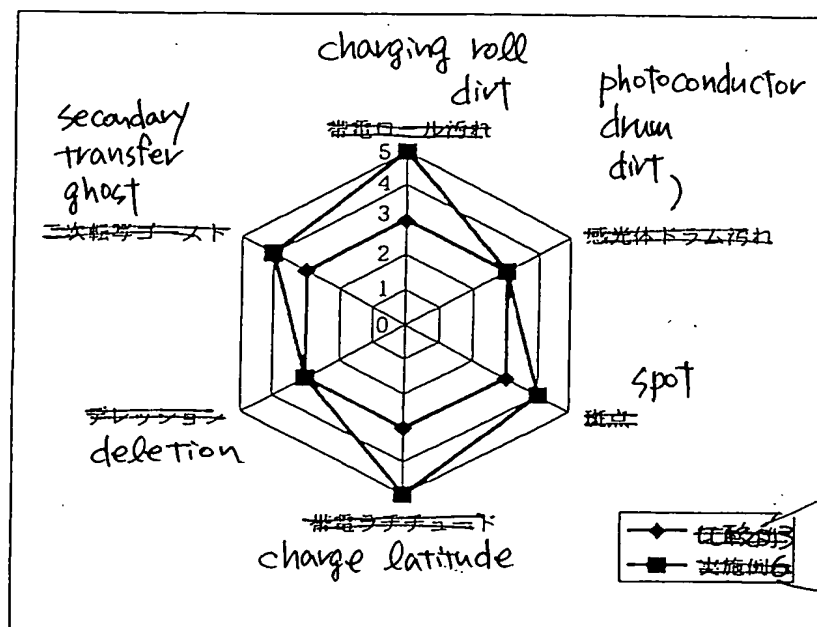


FIG. 32

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comparative
example 3

example 6

FIG.33

